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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,527	03/01/2004	Gus Alexander	226256	2771

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EXAMINER	
RIGGLEMAN, JASON PAUL	

ART UNIT	PAPER NUMBER
1746	

DATE MAILED: 12/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/790,527	ALEXANDER ET AL.	
	Examiner	Art Unit	
	Jason P. Riggleman	1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) *29-31* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 August 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

   I. Claims 1-28, drawn to electrical pressure washer, classified in class 134, subclass 58R.

   II. Claims 29-31, drawn to electrical device, classified in class 345, subclass 83.

2. Inventions I and II are directed to related electrical devices. The related inventions are distinct if the (1) the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect; (2) the inventions do not overlap in scope, i.e., are mutually exclusive; and (3) the inventions as claimed are not obvious variants. See MPEP § 806.05(j). In the instant case, the inventions as claimed do not overlap in scope. Furthermore, the inventions as claimed do not encompass overlapping subject matter and there is nothing of record to show them to be obvious variants.

3. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art due to their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Dennis Schlemmer on 11/20/2006 a provisional election was made with traverse to prosecute the invention of group I, claims 1-28. Affirmation of this election must be made by applicant in replying to this Office action. Claims 29-31 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Drawings

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "102" has been used to designate both a motor and RF transceiver. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "92". Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid

abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

7. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "93" has been used to designate both a first bypass transistor and a second bypass transistor. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. The term "normal" in claims 2 and 22 is a relative term which renders the claim indefinite. The term "normal" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For purposes of examination, normal operation is considered to be motor operation when supplied electricity from an electrical outlet.

10. Claim 17 recites the limitation "the" in "pressure drop". There is insufficient antecedent basis for this limitation in the claim. For purposes of examination, it has been assumed that the applicant intended to claim "the voltage drop" in claim 17.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1-4 and 6 are rejected under 35 U.S.C. 102(b) as being unpatentable by Martin (US Patent No. 4697464).

13. Martin teaches a pressure washer which is connected to a portable diagnostic systems analyzer, Fig. 5. A water line 35 supplies water to an AC powered motor that pressurizes the water. An application wand 60 is connected to the water outlet and has a nozzle 62 for outputting a pressurized water stream. A power cord 34 has a plug at a distal end for connecting AC power to the electrical motor. A diagnostic circuit is taught, block 55A, for detecting a voltage drop over a power cord, indicated by analog gauges

34C-34D, Fig. 1. A voltage monitor is present to measure electrical line voltage through and throughout, the pressure water apparatus (Column 4, Lines 47-50). A pressure sensing means is present to measure the water pressure at the exiting nozzle. A soap line is present for supplying detergent. A sensor 35B measures the water input flow and is capable of determining if adequate water is supplied to the power washer. The gauges in the test panel may be any conventional analog or digital gauges (Column 8, Lines 45-50). The operation condition is illustrated in Fig. 5 by the various configurations of the gauges that display the operation parameters – including any voltage drop in the power cord (Column 6, Lines 15-26). A gauge 35D measures the water temperature being supplied to the electrical motor. A flow meter 70 is shown for measuring the flow of chemical or soap solution being added to the container from the chemical source supply (Column 7, Lines 52-68). An ohm-volt meter means is available for measuring the continuity or voltage at different points in the system. The power cord enters the test panel and is connected to various gauges and meters in the panel which measure the voltage and current draw (Column 6, Lines 55-59).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

15. Claims 8-9 and 18-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (US Patent No. 4697464), as applied to claim 1, above.

16. Martin does not teach a power cord with four wires – two of which are dedicated to tracking voltage changes; however, Martin does teach the use of an ohm-volt meter for spot-checking. Such a device would contain a sending and receiving wire. A spot check could be performed at any location including the plug end of the cord. It has been held that making elements integral would have been obvious (*Nerwin v. Erlichman* 168 *USPQ* 177). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Martin by integrating the ohm-volt meter into the power line as to check the voltage loss in long, lossy, extension cords to prevent motor damage in a portable manner.

17. Claims 7, 10-11, and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (US Patent No. 4697464) as applied to claims 1, 8, and 18 above, and further in view of Dalquist, III et al. (US Patent No. 5040950).

18. Martin does not teach a power cord having a ground fault circuit interrupter; however, Dalquist, III et al. teaches a power washing apparatus a power cord 38 having a plug at a distal end for connecting AC power to the motor 12, Fig. 1, having a ground fault indicator 38 and reset circuit 42. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Martin with Dalquist, III et al. to monitor the electrical power before and after the in-line ground fault circuit interrupter; therefore, allowing complete diagnosis and analysis of any power failures.

19. Claims 5 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (US Patent No. 4697464) as applied to claims 1 and 18-21 above, and further in view of Laabs et al. (US Patent No. 5749526).

20. Martin does not teach an operation condition whereby a thermal protection circuit of the electrical motor is open for protecting the electrical motor; however, Laabs et al. teaches a power washer with a high temperature shut-down switch 34 which shuts down the motor 25 if the temperature exceeds a pre-determined amount. The switch 34 energizes a red indicator light when it shuts off the motor 25 (Column 4, Lines 0-7). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Martin with Laabs et al. to create a power-washing device with a means to indicate that the motor is protected from overheating damage or has been shut-down due to being overheated.

21. Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (US Patent No. 4697464), as applied to claim 1 above, and further in view of Weber (US Patent No. 5757162) and Teague (US Patent No. 5381962).

22. Martin does not teach the use a LED for indicating purposes; however, Teague teaches the use of a plurality of LEDs, Fig. 7, 125, 127, 129, and 131 for indicating the actuation/deactuation of switches/modes of operation (Column 7, Lines 61-70). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Martin with Teague to create a pressure washer with an inexpensive and modern LED diagnostic display.

23. Martin does not teach bypass-transistors, operational amplifiers, nor backup-capacitors; however, the use bypass-transistors wired in parallel to light-emitting diodes, capacitors for storing and supplying a DC power, and operational amplifiers are all well known to those of ordinary skill in the art. It is obvious to wire LEDs in series and to

wire transistors in parallel or series with such LEDs. Weber teaches the use of these components, capacitor 156 wired in series, LED 202-2, optocoupler 200-2, resistor 176-2, operational amplifier (comparator) 170 serves as a power level detector, to monitor the fluctuations of AC power supplied to a power tool – especially in the context of using a long, lossy, extension cord of 75 feet or more in length. Weber teaches that operating a motor with a low voltage is detrimental to the motor life (Column 1, Lines 34-38). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Martin and Teague to provide a means to wire the LED indicator with the pressure washer and to allow it to operate in the event of a power failure when diagnosing pressure washer problems.

Conclusion

Allowable Subject Matter

24. Claims 12 and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P. Riggleman whose telephone number is 571-272-5935. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jason P Riggleman
Examiner
Art Unit 1746

JPR

MICHAEL BARR
SUPERVISORY PATENT EXAMINER